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- (71) Applicant (for all designated States except US): GLY-COFI, INC. [US/US]; 21 Lafayette Street, Suite 200, Lebanon, NH 03766 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): STRAUSS, Joseph [AT/AT]; Edmund Reimgasse W1/11, A-1120 Vienna (AT). PACHLINGER, Robert [AT/AT]; Toellergasse 42/5/6, A-1210 Vienna (AT).
- (74) Agents: HALEY, James, F., Jr. et al.; c/o Fish & Neave, 1251 Avenue of the Americas, New York, NY 10020 (US).

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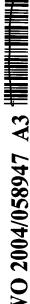
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### (54) Title: STEROID RECEPTOR MODULATION OF GENE EXPRESSION

(57) Abstract: The present invention provides a novel steroid inducible expression system in a non-mammalian host cell (e.g., fungal) that is independent of metabolic and development regulation. The human estrogen receptor gene expressed in Aspergillus, under a constitutive promoter, was shown to be functional. A reporter gene containing regulatory sequences from Aspergillus, yeast and a synthetic sequence containing the estrogen receptor binding sites (EREs) was expressed in response to a hormone derivative inducer. In the absence of the inducer, the promoter is silent and depending on the type of construct and inducer concentration the expression level can e modulated from moderate to very strong.



## INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) : C12N 1/15, 1/19, 15/80, 15/81; C12P 21/02  US CL : 435/69. 1, 254.2, 254.22, 254.23, 254.3, 254.4, 254.5, 254.6, 254.7, 254.8, 320.1  According to International Patent Classification (IPC) or to both national classification and IPC						
B. FIELDS SEARCHED						
Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/69.1, 254.2, 254.22, 254.23, 254.3, 254.4, 254.5, 254.6, 254.7, 254.8, 320.1						
Documentati	on searched other than minimum documentation to the	ne extent tha	t such documents are include	d in the fields searched		
Electronic da Please See C	ata base consulted during the international search (na ontinuation Sheet	me of data b	ase and, where practicable, s	earch terms used)		
	UMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where a	ppropriate,	of the relevant passages	Relevant to claim No.		
X 	TIC 5 017 502 (CITA) (DONERS AT) 05 0 1 1000 105 10			8-12 and 14-19		
Y				1-5, 7		
Y 	US 4,859,609 (DULL ET AL) 22 August 1989 (22.08.1989), see entire document, especially column 10.			1-5, 7		
Α				6, 13		
Y	US 5,216,126 (COX ET AL) 01 June 1993 (01.06.1993), see entire document, especially column 26.			1-5, 7		
Y	US 6,159,705 (TRUEHEART ET AL) 12 December 2000 (12.12.2000), see entire document, especially columns 6 and 15-16.			1-5, 7		
Further	documents are listed in the continuation of Box C.		See patent family annex.			
* S	pecial categories of cited documents:	*T"	later document published after the in	ternational filing date or		
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priority date claimed  Date of the actual completion of the international search		Date of ma	illing of the international sear	ch report		
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Mail Stop PCT, Attn: ISA/US Commissioner for Patents			Terry A. McKelvey			
P.O	. Box 1450 tandria, Virginia 22313-1450	Telephone	No. 703/308-0196	Collins		
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Continuation of B. FIELDS SEARCHED Item 3: EAST (USPAT, USPGPUB, EPO, JPO, Derwent databases), Dialog OneSearch (biotech databases) search terms: steroid, fungus, fungi, yeast?, estrogen receptor, filamentous, receptor?					

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